



SEQUENCE LISTING

<110> Chakravarti, Shukti
Case Western Reserve University

<120> Gene Expression Profiling of
Inflammatory Bowel Disease

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<140> US 10/084,892

<141> 2002-02-27

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<223> monocyte-derived neutrophil chemotactic factor
(MDNCF); interleukin 8 (IL-8) precursor; small
inducible cytokine, subfamily B, member 8 (SCYB8);
chemokine (C-X-C motif) ligand 8 (CXCL8)

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 motif) ligand 1 (CXCL1)

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 growth stimulatory activity beta (MGSA-b); SCYB2;
 chemokine (C-X-C motif) ligand 2 (CXCL2)

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<223> monocyte-derived neutrophil chemotactic factor
(MDNCF); interleukin 8 (IL-8) precursor; small
inducible cytokine, subfamily B, member 8 (SCYB8);
chemokine (C-X-C motif) ligand 8 (CXCL8)

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precursor; small inducible cytokine A4 (SCYA4);
chemokine (C-C motif) ligand 4 (CCL4); activation
protein ACT-2 precursor; secreted protein G-26

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precursor; GRO3 oncogene (GRO3, GRO-gamma, GROG);
SCYB3; chemokine (C-X-C motif) ligand 3 (CXCL3);
melanoma growth stimulatory activity gamma

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<210> 8

<211> 328

<212> DNA

<213> Homo sapiens

<220>

<223> macrophage inflammatory protein 1-beta (MIP-1beta)
precursor; small inducible cytokine A4 (SCYA4);
chemokine (C-C motif) ligand 4 (CCL4); activation
protein ACT-2 precursor; secreted protein G-26

<400> 8

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<213> Homo sapiens

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<223> prointerleukin 1 beta (pro-IL-1beta);
interleukin-1 beta precursor; catabolin

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<222> (135)..(136)

<223> n = g, a, c or t

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<212> DNA

<213> Homo sapiens

<220>

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<210> 11
<211> 1098
<212> DNA
<213> Homo sapiens

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<220>
<223> interleukin-6 (IL-6) precursor; B-cell stimulatory
      factor 2 (BSF-2); hybridoma growth factor; CTL
      differentiation factor (CDF); interferon beta 2
      (IFNB2)

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1098

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<210> 12
<211> 1077
<212> DNA
<213> Homo sapiens

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<220>
<223> growth hormone variant 1 (GH1) and growth hormone
      variant 2 (GH2); hGH-V, hGH-V2

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<210> 13
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 <212> DNA
 <213> Homo sapiens

<220>
 <223> hepatoma-derived growth factor (HDGF);
 high-mobility group protein 1-like 2 (HMG-1L2)

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<210> 14
 <211> 2111
 <212> DNA
 <213> Homo sapiens

<220>

<223> tumor necrosis factor (TNF) receptor superfamily, member 1A
(TNFRSF1A); tumor necrosis factor (TNF) receptor 1 (55kD)
(TNFR1, TNF-R55, p55-R); CD120a; TNFAR; TNFR60

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<210> 15

<211> 534

<212> DNA

<213> Homo sapiens

<220>

<223> neutrophil lipocalin (HNL); lipocalin 2 (LCN2);
human neutrophil gelatinase-associated lipocalin
(Hngal, NGAL); oncogene 24p3; 25 kDa
alpha-2-microglobulin-related subunit of MMP-9

<400> 15

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<210> 16
 <211> 5869
 <212> DNA
 <213> Homo sapiens

<220>
 <223> neutrophil lipocalin (HNL); lipocalin 2 (LCN2);
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 (Hngal, NGAL); oncogene 24p3; 25 kDa
 alpha-2-microglobulin-related subunit of MMP-9

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 <213> Homo sapiens

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 <223> nitric oxide synthase (NOS2); inducible nitric
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 <213> Homo sapiens

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 <223> mitochondrial superoxide dismutase (SOD2);
 manganese-containing superoxide dismutase
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 indophenoloxidase B (IPO-B)

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 <212> DNA
 <213> Homo sapiens

<220>
 <223> phospholipase A2, group IIA (PLA2G2A); rheumatoid
 arthritic synovial fluid phospholipase A2 (RASf-A
 PLA2); phosphatidylcholine 2-acylhydrolase;
 non-pancreatic secretory phospholipase A2 (NPS-PLA2)

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 <213> Homo sapiens

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 inducible protein 4 (TP53I4, PIG4)

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 <212> DNA
 <213> Homo sapiens

<220>
 <223> serum amyloid A (SAA, SAA1); tumor protein p53
 inducible protein 4 (TP53I4, FIG4)

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 <211> 748
 <212> DNA
 <213> Homo sapiens

<220>
 <223> lysozyme (LYZ, LZM) precursor

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<210> 23
 <211> 1971
 <212> DNA
 <213> Homo sapiens

<220>
 <223> cytochrome P-450, family 3, subfamily A, polypeptide 7
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 microsomal monooxygenase; flavoprotein-linked monooxygenase;
 xenobiotic monooxygenase

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<210> 24

<211> 1653

<212> DNA

<213> Homo sapiens

<220>

<223> antioxidant protein 2 (AOP2); peroxiredoxin 6
(PRDX6); 1-Cys periredoxin (1-Cys PRX);
non-selenium glutathione peroxidase (NSGPx);
KIAA0106

<400> 24

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<211> 367

<212> DNA

<213> Homo sapiens

<220>
 <223> metallothionein

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 <211> 1922
 <212> DNA
 <213> Homo sapiens

<220>
 <223> metallothionein-IG (MT1G)

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<210> 27
 <211> 285
 <212> DNA
 <213> Homo sapiens

<220>

<223> nitric oxide synthase 2 (inducible, hepatocyte) (NOS2, NOS2A)

<400> 27

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<210> 28

<211> 3411

<212> DNA

<213> Homo sapiens

<220>

<223> regenerating islet-derived 1 beta (REG1B) precursor;
regenerating protein I beta; lithostathine 1 beta
precursor; secretory pancreatic stone protein 2;
pancreatic thread protein (PTP)

<400> 28

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<210> 29

<211> 4251

<212> DNA

<213> Homo sapiens

<220>

<223> regenerating islet-derived 1 alpha (REG1A) precursor;
regenerating protein I alpha; lithostathine 1 alpha
precursor; secretory pancreatic stone protein (PSP, PSPS);
pancreatic thread protein (PTP)

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<211> 4497

<212> DNA

<213> Homo sapiens

<220>

<223> pancreatitis-associated protein 1 (PAP, PAP1) precursor;
regenerating islet-derived protein 3 alpha (REG3A,
Reg III-alpha) precursor; hepatocarcinoma-intestine-pancreas
(HIP); proliferation-inducing protein 34 (PIG34)

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<210> 31
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<212> DNA
<213> Homo sapiens

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 <212> DNA
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 calgranulin B (CAGB); migration inhibitory
 factor-related protein 14 (MRP-14)

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 (GOS2)

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<210> 36

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<223> S100 calcium-binding protein P (S100P);
migration-inducing gene 9

<400> 36

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<210> 37

<211> 565

<212> DNA

<213> Homo sapiens

<220>

<223> annexin V, annexin 5, annexin A5 (ANX5, ANXA5); lipocortin V;
endonexin II; anchorin CII; placental anticoagulant protein I
(PAP-I); vascular anticoagulant-alpha (VAC-alpha);
calphobindin; anticoagulant protein 4

<400> 37

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<210> 38

<211> 3678

<212> DNA

<213> Homo sapiens

<220>

<223> hypoxia-inducible factor 1 alpha (HIF1A, HIF-1
alpha); basic-helix-loop-helix-PAS protein MOP1;
ARNT interacting protein

<400> 38

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<210> 39
<211> 1910
<212> DNA
<213> Homo sapiens

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interleukin 6-dependent DNA-binding protein;
transcription factor 5

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<221> modified base
<222> (1)..(1910)
<223> n = g, a, c or t

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<210> 40
<211> 774
<212> DNA
<213> Homo sapiens

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<220>
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 precursor; MIF2 suppressor; small
 ubiquitin-related modifier 2 (SUMO2); sentrin 2

<220>
 <221> modified_base
 <222> (1)..(774)
 <223> n = g, a, c or t

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<210> 41
 <211> 2841
 <212> DNA
 <213> Homo sapiens

<220>
 <223> SWI/SNF related, matrix-associated, actin dependent regulator
 of chromatin, subfamily d, member 1 (SMARCD1); SWI/SNF complex
 60 kDa subunit A; chromatin remodeling complex BRG-1/Brm
 associated factor 60A (BAF60A); Swp73-like protein

<400> 41
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<210> 42
<211> 2444
<212> DNA
<213> Homo sapiens

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<220>
<223> NF-kappa-B transcription factor p65 subunit
      (NFKB3); p65delta2; RELA

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<210> 43

<211> 1301

<212> DNA

<213> Homo sapiens

<220>

<223> basic transcription element binding protein 2;
transcription factor BTEB2; krueppel-like factor 5
(intestinal) (KLF5, IKLF); similar to colon
Krueppel-like factor (CKLF); GC-box binding protein

<400> 43

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<210> 44

<211> 2346

<212> DNA

<213> Homo sapiens

<220>

<223> guanine nucleotide-binding protein alpha subunit
(GNAS1, Gs alpha); secretogranin VI

<400> 44

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<210> 45

<211> 41936

<212> DNA

<213> Homo sapiens

<220>

<223> liver-specific BHLH-Zip transcription factor;
B6CBA LISCH7 homolog; lipolysis-stimulated
lipoprotein receptor; chromosome 19-cosmid R30879

<400> 45

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<210> 46

<211> 1342

<212> DNA

<213> Homo sapiens

<220>

<223> insulin-like growth factor binding protein 2
(IGFBP-2, IBP-2) precursor

<400> 46

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<210> 47

<211> 3839

<212> DNA

<213> Homo sapiens

<220>

<223> zinc finger protein 91 (ZNF91); Krueppel related
zinc finger protein; HTF10; HPF7

<400> 47

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 <211> 1381
 <212> DNA
 <213> Homo sapiens

<220>
 <223> general transcription factor IIIA (GTF3A)

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1381

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<210> 49
 <211> 952
 <212> DNA
 <213> Homo sapiens

<220>
 <223> sorcin CP-22 (SRI); calcium binding protein
 amplified in multidrug-resistant cells

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<210> 50

<211> 1360

<212> DNA

<213> Homo sapiens

<220>

<223> creatine kinase, brain; creatine kinase-B (CKB,
B-CK, CKBB)

<400> 50

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<210> 51

<211> 1910

<212> DNA

<213> Homo sapiens

<220>

<223> CCAAT/enhancer binding protein (C/EBP beta, CEBPB);
nuclear factor NF-IL6 (IL6DBP); TCF5; CRP2; LAP

<220>

<221> modified_base

<222> (1)..(1910)

<223> n = g, a, c or t

<400> 51

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<210> 52

<211> 2855

<212> DNA

<213> Homo sapiens

<220>

<223> cut-like 1 (CUTL1); CCAAT displacement protein (Drosophila) (CDP); CASP

<400> 52

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<210> 53

<211> 607

<212> DNA

<213> Homo sapiens

<220>

<223> DNA-directed RNA polymerase II polypeptide J, transcript
variant a (POLR2J, RPO2); hRPB14; RPB11, hSRPB11

<400> 53

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gaagaga 607

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<210> 54

<211> 1578

<212> DNA

<213> Homo sapiens

<220>

<223> TATA box binding protein (TBP)-associated factor;
transcription factor SL1; RNA polymerase I, A 48kD (TAF1A,
TAFI48, RAFI48)


```

<400> 54
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```

<210> 55

<211> 927

<212> DNA

<213> Homo sapiens

<220>

<223> epithelial protein up-regulated in carcinoma
(DD96); membrane associated protein 17 (MAP17);
PDZK1 interacting protein 1 (PDZK1IP1)

<400> 55

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```

<210> 56

<211> 595

<212> DNA

<213> Homo sapiens

<220>

<223> calgizzarin; S100 calcium binding protein A11
(S100A11); protein S100C; MLN 70

<400> 56

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<210> 57

<211> 1433

<212> DNA

<213> Homo sapiens

<220>

<223> down-regulated in rhabdomyosarcoma LIM protein
(DRAL); four and a half LIM domains protein 2
(FHL-2); skeletal muscle LIM-protein 3 (SLIM 3);
aging associated gene 11 (AAG11)

<400> 57

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<210> 58

<211> 2416

<212> DNA

<213> Homo sapiens

<220>

<223> MAX interacting protein 1 (MXI1); MAX interactor 1
tumor suppressor; Max-related transcription
factor; MAX dimerization protein 2

<400> 58

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<210> 59

<211> 2881

<212> DNA

<213> Homo sapiens

<220>

<223> colon mucosa-associated down-regulated in adenoma
(DRA); solute carrier family 26, member 3
(SLC26A3); chloride anion exchanger; congenital
chloride diarrhea

<400> 59

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<212> DNA
<213> Homo sapiens

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LPSB

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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(HLA-DRB4)

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antigen

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<213> Homo sapiens

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<223> MHC HLA class II DR alpha heavy chain (HLA-DRA)

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<210> 66

<211> 1100

<212> DNA

<213> Homo sapiens

<220>

<223> MHC HLA class II DM alpha chain-like (HLA-DMA);
RING6

<400> 66

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<210> 67
 <211> 1763
 <212> DNA
 <213> Homo sapiens

<220>
 <223> MHC HLA class II DR2-Dw12 DQw1-beta chain
 (HLA-DRB2, HLA-Dw12)

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 <211> 1216
 <212> DNA
 <213> Homo sapiens

<220>
 <223> MHC HLA class II DQw1.1 beta chain (HLA-DQB1)
 precursor

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<210> 69

<211> 915

<212> DNA

<213> Homo sapiens

<220>

<223> rearranged immunoglobulin lambda light chain (Ig lambda)

<400> 69

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agcccttctc cctgc                                     915

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<210> 70

<211> 527

<212> DNA

<213> Homo sapiens

<220>

<223> immunoglobulin heavy chain (IgH), VDJRC region

<400> 70

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<210> 71
 <211> 382
 <212> DNA
 <213> Homo sapiens

<220>
 <223> immunoglobulin lambda-like protein (IGLL2)

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 cccctgcaga atgttcatag gttccagccc ccaccccacc acaggggcct ggagctgcag 360
 gatcccaggg gaggggtctc tc 382

<210> 72
 <211> 1244
 <212> DNA
 <213> Homo sapiens

<220>
 <223> immunoglobulin rearranged gamma chain, V-J-C
 region

<400> 72
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<210> 73
 <211> 454
 <212> DNA
 <213> Homo sapiens

<220>
 <223> immunoglobulin rearranged kappa light chain,
 variable region

<400> 73
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gaaatctgga ctgcctctgt tgtgtgacct ctga 454

<210> 74
<211> 676
<212> DNA
<213> Homo sapiens

<220>
<223> MHC HLA class II Ia-associated invariant gamma
chain; CD74 antigen

<400> 74
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<212> DNA
<213> Homo sapiens

<220>
<223> omega light chain protein 14.1, immunoglobulin
lambda chain-like

<400> 75
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<210> 76
<211> 2919
<212> DNA
<213> Homo sapiens

<220>

<223> polymeric immunoglobulin receptor (poly-Ig
receptor, PIGR) precursor; hepatocellular
carcinoma-associated protein TB6; transmembrane
secretory component (SC)

<400> 76

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<210> 77

<211> 1799

<212> DNA

<213> Homo sapiens

<220>

<223> immunoglobulin alpha heavy chain allotype 2
constant region; IgA2 H chain C region (IGHA2)

<400> 77

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<210> 78

<211> 1151

<212> DNA

<213> Homo sapiens

<220>

<223> T-cell specific protein; T-cell receptor
beta-chain

<400> 78

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cccaggggga c 1151

```

```

<210> 79
<211> 1032
<212> DNA
<213> Homo sapiens

```

```

<220>
<223> gamma-interferon-inducible protein precursor
      (IP30); contains gamma-interferon inducible
      lysosomal thiol reductase (GILT)

```

```

<400> 79
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aactagttta at 1032

```

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<210> 80
<211> 2709
<212> DNA
<213> Homo sapiens

```

```

<220>
<223> interferon-gamma induced protein 16 (IFI16);
      interferon-inducible myeloid differentiation
      transcriptional activator

```

```

<400> 80
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<210> 81
 <211> 483
 <212> DNA
 <213> Homo sapiens

<220>
 <223> hepatitis C-associated microtubular aggregate
 protein p44

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acgtaaat	cctcacatca	cagaagatta	aaattcagaa	aggagaaaaa	acagacccaa	180
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ttt						483

<210> 82
 <211> 634
 <212> DNA
 <213> Homo sapiens

<220>

<223> interferon-stimulated protein 15 kDa (ISG15); ISG15
ubiquitin-like modifier; ubiquitin cross-reactive protein
(UCRP) precursor; interferon alpha-inducible protein
(IFI-15K); interferon-induced 17 kDa protein precursor

<400> 82

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caagggccgg aaataaaggc tgttgtaaga gaat 634
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<210> 83

<211> 1451

<212> DNA

<213> Homo sapiens

<220>

<223> interleukin 2 receptor gamma subunit chain (IL2RG,
hIL-2Rg) precursor; cytokine receptor common gamma
chain (gamma-C) precursor; CD132 antigen; p64

<400> 83

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tgataatcat c 1451
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<210> 84

<211> 1071

<212> DNA

<213> Homo sapiens

<220>

<223> complement factor D (DF) precursor; adipsin; C3
convertase activator; properdin factor D

<400> 84

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<210> 85

<211> 1192

<212> DNA

<213> Homo sapiens

<220>

<223> CD9 antigen; leukocyte antigen MIC3;
motility-related protein-1 (MRP-1); tetraspanin-29
(Tspan-29)

<400> 85

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<210> 86

<211> 213

<212> DNA

<213> Homo sapiens

<220>
 <223> MHC HLA DG; protein 41; clone pcDG-79

<400> 86
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 cgcggggcacc ataactgcag tgagtcactg gaa 213

<210> 87
 <211> 2880
 <212> DNA
 <213> Homo sapiens

<220>
 <223> defensin 5 (DEF5) preproprotein; defensin alpha 5
 (DEFA5); paneth cell-specific alpha-defensin 5

<400> 87
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<212> DNA
<213> Homo sapiens

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      alpha-defensin 6

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<211> 1778

<212> DNA

<213> Homo sapiens

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precursor; macrophage elastase (ME)

<400> 89

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<211> 2334

<212> DNA

<213> Homo sapiens

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gelatinase; type IV collagenase (CLG4A)

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<212> DNA

<213> Homo sapiens

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type I interstitial collagenase; fibroblast
collagenase; tissue collagenase

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 <213> Homo sapiens

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 stromelysin 1 (SL-1) precursor, preprostomelysin;
 proteoglycanase; progelatinase; transin-1

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<212> DNA
<213> Homo sapiens

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 <213> Homo sapiens

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 chain precursor; prepro-alpha2(I) collagen
 (COL1A2)

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(COL6A3)

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<213> Homo sapiens

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(COL1A1)

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collagen (COL3A1); Ehlers-Danios syndrome type IV;
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<400> 97

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<210> 98

<211> 1585

<212> DNA

<213> Homo sapiens

<220>

<223> collagen alpha-2(VI) chain precursor; collagen VI
alpha-2; alpha-2 type VI collagen; type VI
collagen alpha 2 chain precursor (COL6A2)

<400> 98

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<210> 99

<211> 2212

<212> DNA

<213> Homo sapiens

<220>

<223> collagen alpha-2(IV) chain precursor; alpha-2 type
IV collagen; type IV collagen alpha (2) chain;
(COL4A2); procollagen; basement membrane collagen

<400> 99

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<210> 100

<211> 1830

<212> DNA

<213> Homo sapiens

<220>

<223> mucin 4; tracheo-bronchial mucin (MUC4)

<400> 100

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<210> 101

<211> 490

<212> DNA

<213> Homo sapiens

<220>

<223> trefoil factor 1 (TFF1) precursor; gastrointestinal trefoil protein pS2; pS2 protein precursor; protein NR-2/pS2; estrogen-regulated protein pNR-2; breast cancer estrogen inducible sequence (BCE1, BCE I); HPl.A

<400> 101

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<210> 102

<211> 229

<212> DNA

<213> Homo sapiens

<220>

<223> intestinal mucin

<400> 102

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<210> 103

<211> 2133

<212> DNA

<213> Homo sapiens

<220>

<223> osteonectin precursor; secreted protein, acidic, cysteine rich (SPARC); basement-membrane protein 40 (BM-40); extracellular matrix protein BM-40

<400> 103

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<210> 104

<211> 1182

<212> DNA

<213> Homo sapiens

<220>

<223> proteoglycan 1 (PRG1); hematopoietic proteoglycan core protein;
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serglycin (SRGN) precursor; proteoglycan secretory granule 1;
HL-60 cell proteoglycan peptide core; platelet proteoglycan

<400> 104

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<210> 105

<211> 1806

<212> DNA

<213> Homo sapiens

<220>

<223> peripheral myelin protein 22 (PMP22); growth
arrest-specific 3 (GAS-3); SR13 protein;
PAS-II/SR13/Gas-3

<400> 105

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<212> DNA

<213> Homo sapiens

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migration-stimulating factor

<400> 106

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 <212> DNA
 <213> Homo sapiens

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 (RGD-CAP); ig-h3, beta ig.h3

<400> 107

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<211> 3213

<212> DNA

<213> Homo sapiens

<220>

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(fasciclin-I-like); periostin (PN, POSTN);
periodontal ligament-specific periostin

<400> 108

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 <213> Homo sapiens

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<211> 2597

<212> DNA

<213> Homo sapiens

<220>

<223> adducin 2 (ADD2); adducin 2 (beta); beta adducin;
beta adducin 2; rabphilin-3A-interacting protein

<400> 112

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<211> 802

<212> DNA

<213> Homo sapiens

<220>
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 <213> Homo sapiens

<220>
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 GS2374

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 <212> DNA
 <213> Homo sapiens

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 cytoskeletal 20; protein IT

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 <212> DNA
 <213> Homo sapiens

<220>
 <223> zygin 2, zygin II; fasciculation and elongation protein
 zeta 2 (FEZ2); pre-T/NK cell associated protein (3CL,
 HUM3CL); similar to C. elegans UNC-76

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<211> 820

<212> DNA

<213> Homo sapiens

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Arp2/3 protein complex 20 kD subunit (p20-Arc); EST clone
Id number 187446

<400> 117

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<212> DNA

<213> Homo sapiens

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<223> paralemmin (PALM); KIAA0270

<400> 118

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<211> 105

<212> DNA

<213> Homo sapiens

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<223> esterase D (ESD); esterase 10; S-formylglutathione
hydrolase (FGH)

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<210> 120

<211> 4656

<212> DNA

<213> Homo sapiens

<220>

<223> aldolase B (ALDOB, ALDB); aldolase 2,
fructose-bisphosphatase; fructose-1,6-bisphosphate
aldolase; fructose-1,6-bisphosphate
triosephosphate lyase B

<400> 120

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<210> 121
 <211> 1062
 <212> DNA
 <213> Homo sapiens

<220>
 <223> glucagon (GCG) preproprotein; enteroglucagon;
 glicentin-related polypeptide (GRPP);
 oxyntomodulin (OXY, OXM)

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<210> 122
 <211> 2578
 <212> DNA
 <213> Homo sapiens

<220>

<223> monocarboxylate transporter 1 (MCT1); solute
carrier, family 16, member 1 (SLC16A1)

<400> 122

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<210> 123

<211> 4122

<212> DNA

<213> Homo sapiens

<220>

<223> 2-oxoglutarate dehydrogenase (OGDH) precursor; 2-oxoglutarate
dehydrogenase E1 component, mitochondrial precursor;
alpha-ketoglutarate dehydrogenase; oxoglutarate
(alpha-ketoglutarate) dehydrogenase (lipoamide)

<400> 123

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<210> 124
 <211> 1450
 <212> DNA
 <213> Homo sapiens

<220>
 <223> alcohol dehydrogenase 1A (ADH1A, ADH1); class I
 alcohol dehydrogenase alpha subunit (aADH);
 aldehyde reductase

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<210> 125
 <211> 1523
 <212> DNA
 <213> Homo sapiens

<220>
 <223> carbonic anhydrase II (CA2, CA II); carbonic
 anhydrase B; carbonic dehydratase; carbonate
 dehydratase II

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<210> 126

<211> 655

<212> DNA

<213> Homo sapiens

<220>

<223> carbonic anhydrase IV (CA4, CA-IV) precursor;
carbonic dehydratase; carbonate dehydratase IV;
retinitis pigmentosa 17 (autosomal dominant)

<400> 126

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tttttagcct	tccacaacta	ccccaccctg	tccccctcca	cccacccctg	ttcctcctgt	600
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<210> 127

<211> 2657

<212> DNA

<213> Homo sapiens

<220>

<223> phosphoenolpyruvate carboxykinase 1, soluble
(PCK1, PEPCK)

<400> 127

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<210> 128

<211> 1248

<212> DNA

<213> Homo sapiens

<220>

<223> syntaxin 4A (STX4A, STX4) precursor; syntaxin
(placental)

<400> 128

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<210> 129

<211> 2010

<212> DNA

<213> Homo sapiens

<220>

<223> chaperonin subunit 6A (CCT6A); chaperonin containing T-complex protein 1 (TCP1), subunit 6A; chaperonin containing TCP1, zeta 1 (CCT-zeta-1); histidine transport regulator 3 (HTR3); acute morphine dependence related protein 2; TRiC chaperonin subunit

<400> 129

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<210> 130
 <211> 2422
 <212> DNA
 <213> Homo sapiens

<220>

<223> UDP-glycosyltransferase 1 (UGT1);
 UDP-glycosyltransferase 1 family, polypeptide A6
 (UGT1A6); phenol UDP-glucuronosyltransferase
 (UDPGT); phenol transferase UGT1F; GNT1

<400> 130

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<210> 131
 <211> 8447
 <212> DNA
 <213> Homo sapiens

<220>

<223> sulfotransferase family, cytosolic, 1A, phenol-preferring,
member 3 (SULT1A3, ST1A3); thermolabile phenol sulfotransferase
(STM); catecholamine-sulfating phenol sulfotransferase;
placental estrogen sulfotransferase (EST); aryl sulfotransferase

<400> 131

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<211> 2191

<212> DNA

<213> Homo sapiens

<220>

<223> beta-glucuronidase (GUSB) precursor;
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glucuronosohydrolase; glucuronohydrolase; beta-G1

<400> 132

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<210> 133
 <211> 2090
 <212> DNA
 <213> Homo sapiens

<220>
 <223> UDP-glucuronosyltransferase 2 family, protein B15 (UGT2B15, UDPGT) precursor; UDP-glucuronosyltransferase 2B8 (UGT2B8) precursor, microsomal (estriol-specific); dihydrotestosterone/ androstanediol UDP-glucuronosyltransferase isoform 3 (UDPGTh-3)

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<210> 134

<211> 1137

<212> DNA

<213> Homo sapiens

<220>

<223> thiosulfate sulfurtransferase (TST);
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 cyanide transsulfurase; thiosulfate
 thiotransferase; rhodanese

<400> 134

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<210> 135

<211> 3494

<212> DNA

<213> Homo sapiens

<220>

<223> aminopeptidase N (ANPEP, PEPN, APN) precursor; membrane alanine
 aminopeptidase precursor; alanyl (membrane) aminopeptidase;
 microsomal aminopeptidase; aminopeptidase M; CD13 antigen;
 p150; IGF1R

<400> 135

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aaaaaaaaa aaaa 3494

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<210> 136

<211> 1815

<212> DNA

<213> Homo sapiens

<220>

<223> protective protein for beta-galactosidase (PPGB,
PPR) precursor; beta-galactosidase 2;
carboxypeptidase C precursor; lysosomal protective
protein; cathepsin A precursor

<400> 136

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ccggggctgg ccaagcagcc gtctttccgc cagtactccg gctacctcaa aagctccggc 180

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<210> 137

<211> 584

<212> DNA

<213> Homo sapiens

<220>

<223> fatty acid binding protein 6 (FABP6); gastropin (GT) isoform 1; ileal lipid-binding protein (ILBP, Illbp); ileal bile acid binding protein (I-BABP); intestinal 15 kDa protein (I-15P)

<400> 137

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<210> 138

<211> 634

<212> DNA

<213> Homo sapiens

<220>

<223> fatty acid binding protein 4, adipocyte (FABP4); adipocyte lipid-binding protein (ALBP); aP2; p15

<400> 138
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<210> 139
 <211> 489
 <212> DNA
 <213> Homo sapiens

<220>
 <223> fatty acid binding protein 1, liver (FABP1, FABP2,
 L-FABP); fatty acid binding protein, hepatic; Z
 protein; sterol carrier protein

<400> 139
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<210> 140
 <211> 882
 <212> DNA
 <213> Homo sapiens

<220>
 <223> delta3, delta2-CoA-isomerase (DCI);
 delta(3)-delta(2)-enoyl-CoA isomerase;
 dodecenoyl-CoA delta-isomerase precursor,
 mitochondrial; 3,2-trans-enoyl-CoA isomerase

<400> 140
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<210> 141
 <211> 1584
 <212> DNA
 <213> Homo sapiens

<220>
 <223> acetyl-CoA acyltransferase 2 (ACAA2);
 mitochondrial 3-oxoacyl-CoA thiolase;
 3-ketoacyl-CoA thiolase, mitochondrial;
 beta-ketothiolase; T1

<400> 141
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<210> 142
 <211> 9127
 <212> DNA
 <213> Homo sapiens

<220>
 <223> 3-beta hydroxysteroid dehydrogenase type II (HSD3B2);
 5delta-4delta isomerase; 3-beta isomerase 2; hydroxy-delta-5
 steroid dehydrogenase; steroid delta-isomerase 2; 3beta-hydroxy
 delta5-steroid dehydrogenase multifunctional protein II

<400> 142
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 <212> DNA
 <213> Homo sapiens

<220>
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 precursor; T2

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 <212> DNA
 <213> Homo sapiens

<220>
 <223> acyl-CoA dehydrogenase, C-2 to C3 short chain
 (ACADS) precursor; short-chain specific acyl-CoA
 dehydrogenase (SCAD) precursor

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<210> 145

<211> 1344

<212> DNA

<213> Homo sapiens

<220>

<223> hydroxysteroid (17-beta) dehydrogenase 2 (HSD17B2); 17 beta hydroxysteroid dehydrogenase type 2 (17b-HSD); 17beta-estradiol dehydrogenase; estradiol 17beta dehydrogenase type 2; 20alpha-hydroxysteroid dehydrogenase

<400> 145

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<210> 146
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<220>
 <223> 11-beta-hydroxysteroid dehydrogenase type II
 (HSD11B2, 11-beta-HSD2, 11-DH2); corticosteroid
 11-beta-dehydrogenase, isozyme 2; NAD-dependent
 11-beta-hydroxysteroid dehydrogenase

<400> 146						
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attagggccc	caactacaca	cccccaagcc	acagggaagc	atgtactgta	cttcccaatt	1860
gccacatttt	aaataaagac	aaatttttat	ttctttct			1897

<210> 147
 <211> 511
 <212> DNA
 <213> Homo sapiens

<220>
 <223> MAT8 protein; FXYD domain containing ion transport
 regulator 3 (FXYD3) precursor; chloride
 conductance inducer Mat-8; phospholemmann-like
 protein

<220>
 <221> modified_base
 <222> (511)
 <223> n = g, a, c or t

<400> 147
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<210> 148
 <211> 571
 <212> DNA
 <213> Homo sapiens

<220>
 <223> guanylate cyclase activator 2A (GUCA2A); guanylate
 cyclase activating protein 1 (Gap-I); guanylin 2,
 intestinal, heat-stable; guanylin precursor;
 proguanylin

<400> 148
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<210> 149
 <211> 755
 <212> DNA
 <213> Homo sapiens

<220>
 <223> 6-pyruvoyl-tetrahydropterin synthase (PTPS, PTS);
 PTP synthase

<400> 149
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taaattttaag	tctattttaa	actaaacttg	taatatacat	cctgaaaaatc	atthagagag	720
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<210> 150
 <211> 3727
 <212> DNA
 <213> Homo sapiens

<220>
 <223> KIAA0035; similar to rat nucleolar phosphoprotein
 of 140 kD (RATNOP140B), nucleolar and coiled body
 phosphoprotein 1 (NOLC1), nucleolar phosphoprotein
 p130; trans-regulated protein 13; HCV NS5A

<400> 150						
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<210> 151

<211> 5654

<212> DNA

<213> Homo sapiens

<220>

<223> KIAA0367; BNIP2 motif containing molecule at
carboxyl terminal region (BMCC1)

<400> 151

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aaaattgatt ctgc 5654

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<210> 152
 <211> 1144
 <212> DNA
 <213> Homo sapiens

<220>
 <223> endogenous retrovirus envelope region; pseudo-env;
 PL1

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<210> 153
 <211> 494
 <212> DNA
 <213> Homo sapiens

<220>
 <223> cytochrome c oxidase subunit Vb, mitochondrial
 precursor; cytochrome c oxidase subunit 5B (COX5B)

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<400> 153
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 tggtccttc tccc 494

<210> 154

<211> 1620

<212> DNA

<213> Homo sapiens

<220>

<223> pancreatic ribonuclease A precursor; ribonuclease,
 RNase A family, 1 (pancreatic) (RNASE1, RNS1,
 RNase A, RNase 1); ribonuclease HK-2A; ribonuclease,
 secretory; HP-RNase; RNase UPI-1; RIB1

<400> 154

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<210> 155

<211> 2000

<212> DNA

<213> Homo sapiens

<220>

<223> K12 protein precursor; secreted and transmembrane
 protein 1 (SECTM1) precursor

<400> 155

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2000

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<210> 156

<211> 121

<212> DNA

<213> Homo sapiens

<220>

<223> CpG-enriched DNA, clone E18

<400> 156

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a
121

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<210> 157

<211> 1098

<212> DNA

<213> Homo sapiens

<220>

<223> caspase and RIP adaptor with death domain (CRADD);
 CASP2 and RIPK1 domain containing adaptor with death domain
 (CRADD); death domain containing protein CRADD

<400> 157

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1098

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<210> 158

<211> 2920

<212> DNA

<213> Homo sapiens

<220>

<223> meprin 1A, meprin A alpha; N-benzoyl-L-tyrosyl-p-amino-benzoic acid hydrolase alpha subunit (PPH alpha); PABA peptide hydrolase; astacin metalloendopeptidase

<400> 158

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<210> 159

<211> 1615

<212> DNA

<213> Homo sapiens

<220>

<223> N-acetyl-transferase 1 (NAT1); arylamine

N-acetyltransferase (AAC1)

<400> 159

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<210> 160

<211> 2966

<212> DNA

<213> Homo sapiens

<220>

<223> protein phosphatase 2 catalytic subunit, alpha isoform

(PPP2CA); protein phosphatase 2A catalytic subunit-alpha

<400> 160

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<210> 161
 <211> 1119
 <212> DNA
 <213> Homo sapiens

<220>
 <223> tetraspanin-3 (Tspan3); transmembrane 4 superfamily
 tetraspan TM4SF; globin regulator, clone 52, globin promoter
 trans-activator

<400> 161
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 ctcttagctg ctgcagagag actgccagca attgtaatgg cagcctggcc cacccttccg 120


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<210> 162

<211> 852

<212> DNA

<213> Homo sapiens

<220>

<223> platelet activating factor (PAF) acetylhydrolase isoform 1b,
gamma subunit (PAFAH1B3)

<400> 162

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<210> 163

<211> 874

<212> DNA

<213> Homo sapiens

<220>

<223> tetranectin A (TNA); plasminogen binding protein;
plasminogen-kringle 4 binding protein

<400> 163

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874

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<210> 164

<211> 871

<212> DNA

<213> Homo sapiens

<220>

<223> preprokallikrein; kallikrein 1 (KLK1) clone phKK25;
kallikrein, renal/pancreas/salivary (KLKR)

<400> 164

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871

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<210> 165

<211> 1196

<212> DNA

<213> Homo sapiens

<220>

<223> enoyl CoA hydratase 1, peroxisomal (ECH1); peroxisomal
enoyl-coenzyme A hydratase-like protein; dienoyl CoA
isomerase; delta3,5-delta2,4-dienoyl-CoA isomerase; HPXEL

<400> 165

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<210> 166

<211> 2058

<212> DNA

<213> Homo sapiens

<220>

<223> 3-hydroxy-3-methylglutaryl coenzyme A synthase 2;
mitochondrial HMG CoA synthase 2 (HMGCS2); hydroxymethyl-CoA
synthase; hydroxymethylglutaryl-CoA synthase

<400> 166

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2058

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<210> 167

<211> 3976

<212> DNA

<213> Homo sapiens

<220>

<223> SREBP cleavage-activating protein (SCAP); KIAA0199

<400> 167

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<210> 168

<211> 3600

<212> DNA

<213> Homo sapiens

<220>

<223> guanylate cyclase activator 2B (GCAP-II, GUCA2B);
guanylate cyclase C activating peptide II; uroguanylin

<400> 168

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<210> 169

<211> 4622

<212> DNA

<213> Homo sapiens

<220>

<223> mitochondrial cytochrome c-1; cytochrome c1 subunit of
mitochondrial cytochrome bcl complex (CYC1)

<400> 169

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 <213> Homo sapiens

<220>
 <223> COX17 homolog; cytochrome c oxidase assembly protein
 (yeast) homolog; mitochondrial copper recruitment homolog;
 copper metallochaperone homolog

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<210> 171
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<212> DNA
<213> Homo sapiens

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      receptor (hERR1, ERR1, ERR alpha); estrogen receptor-like 1
      (ESRL1); ESRRA, ESR; NR3B1

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<210> 172
<211> 5749
<212> DNA
<213> Homo sapiens

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<220>

<223> mineralocorticoid receptor (MLR, hMR, MCR); aldosterone
receptor; nuclear receptor subfamily 3, group C, member 2
(NR3C2)

<400> 172

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<211> 769

<212> DNA

<213> Homo sapiens

<220>

<223> plasma membrane Ca²⁺ pump isoform 1a (alternatively spliced) (hPMCA1a, PMCA1), ATPase, Ca⁺⁺ transporting, plasma membrane 1 (ATP2B1)

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<210> 174

<211> 2823

<212> DNA

<213> Homo sapiens

<220>

<223> ATPase, H⁺ transporting, lysosomal (vacuolar proton pump)
subunit 1 (ATP6S1); Xq terminal portion ORF

<400> 174

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 (GLVR1); phosphate transporter/retroviral receptor

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<212> DNA

<213> Homo sapiens

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sulfur transporter (DTDST); sulfate anion transporter 1;
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<213> Homo sapiens

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<210> 178

<211> 2904

<212> DNA

<213> Homo sapiens

<220>

<223> butyrophilin, subfamily 2, member A1, transcript variant 1
(BTN2A1, BTF1, BT2.1)

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<211> 498

<212> DNA

<213> Homo sapiens

<220>

<223> glycophorin E (GYPE)

<400> 179

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